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| 31561 | 7590 | 10/19/2005 | EXAMINER | |
| JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN | | | BLENMAN, AVALON | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2153 | |

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,455

Applicant(s)

HAN, CHIA-HUI

Examiner

Avalon Blenman

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is a second action in response to amendment and remarks filed July 11th, 2005. Claims 1-12 are presented for further consideration, of which 1, 7, & 8 are independent claims. Claims 4, 5, & 7-10 have been amended. No claims have been cancelled. Claim 12 has been added. This office action is made **FINAL**.

Response to Amendment

2. Applicant's amendments overcome the objection to certain informalities of the specification and claims 1, 5, 7, & 10 have been accepted. As such, these objections are withdrawn.

3. Applicant's amendment to claims 7 & 8 to overcome the 35 U.S.C. 112 rejections have been accepted. As such, these rejects are withdrawn.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 5 & 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter ("SubSystem ID" & "SubVendor ID") which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the

Art Unit: 2153

inventor(s), at the time the application was filed, had possession of the claimed invention. It is noted by Examiner that, Applicants reference to ¶0009 & ¶0017 are not descriptive as to what a "SubSystem ID" and a "SubVendor ID" is. Examiner is still unclear as these sections merely make mention of such parameters. This claim will be treated as best understood by examiner.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, & 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Szczepanek (US Patent 5,321,819)**, further in view of **McIntyre (US 6,381,218) et al.**, hereinafter McIntyre.

8. Regarding claim 1, Szczepanek discloses a network interface system capable of supporting a plurality of physical layers comprising:

- a network interface adapter (fig. 1 #12, network adaptor) supporting the plurality of physical layers (claim 1), for connecting to a computer network (fig. 1, #14, network bus), and further comprising:
 - a physical layer chip (fig. 2, # 24, adapter chip), capable of supporting the plurality of physical layers [col. 5, lines 60-64, col. 2, line 61 – col. 3, line 1];

- a device code storage device (fig. 2, #44, memory), for storing a device code of the network interface adapter supporting the plurality of physical layers [col. 8, lines 24-2];
- a magnetic inductor (fig. 1, # 22a, internal bus), for coupling the physical layer chip (adapter chip), and interfacing between the physical layer chip and the computer network (fig. 1, #14) [col. 4, lines 35-39];
- a first type connector (fig. 1, # 22, interface), coupling to the computer network through one of the network physical layers (col. 6, lines 27-28, 58-63); and
- a computer system (fig. 1, #10, host system), for inserting (via fig. 6, #234, connector) the network interface adapter (network adaptor) supporting the plurality of physical layers [col. 4, lines 25-39].

While Szczepanek discloses these features, Szczepanek does not explicitly disclose a second type connector or an input/output for providing a selection screen of network physical layers. Nonetheless, in analogous art, McIntyre also discloses a network interface system (fig. 1). McIntyre further discloses:

- a second type connector (port), for coupling to the computer network through one of the network physical layers [col. 6, lines 27-28, 47-63].
- a basic input/output (fig. 1, #112-116, keyboard/monitor display), for providing a selection screen of the network physical layers and reading the device code, so as to calculate a simulation device code ("determination logic") corresponding to

a selected network physical layer according to the selected network physical layer and the device code [col. 5, lines 11-26, col. 14, lines 50-65];

- a chipset (fig. 1, #102, mother board and bus system), coupled to the basic input/output system, and embedded a network media access controller to provide an interface for the network interface adapter (NIC) supporting the plurality of physical layers [col. 5, lines 11-26]; and
- a central processing unit (CPU) (fig. 1, #104), coupled to the chipset (motherboard) to execute an operating system of the computer system, the basic input/output system, and set up a device driver of the computer system according to the simulation device code [col. 4, lines 33-54].

Given the teachings of McIntyre, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system/method disclosed by Szczepanek to include a second type connector, a basic input output, a chipset, and a central processing unit. The motivation as suggested by Szczepanek would be to allow a user to configure the network interface adaptor, based on the desired operating mode or physical layer [col. 14, lines 50-65].

9. Regarding claims **2 & 9**, Szczepanek discloses:

- the physical layer chip supports at least any two of the network physical layers of Ethernet, HomeNet, Wireless LAN and Home Plug [col. 3, lines 11-18, col. 4, lines 45-48].

10. Regarding claims **3 & 10**, McIntyre discloses:

- the computer system at least has installed any two of the device drivers of the network physical layers of Ethernet, HomeNet, Wireless LAN and Home Plug [col. 6, lines 47-50].

11. Regarding claim **4**, McIntyre discloses:

- the interface complies with the advanced communication riser interface standard defined by US AMD Corporation [col. 4, lines 48-53].

12. Regarding claim **5**, McIntyre discloses:

- the operating system is a Windows operating system [col. 6, lines 50-53];

13. Regarding claims **6 & 11**, McIntyre discloses:

- the basic input/output system program provides a manual option (manual mode) and an automatic option (Switch on Fail mode), wherein when the automatic mode is selected by the user, the computer system automatically detects the network physical layer that is physically connected, and calculates the simulation device code for the computer system to recognize the connected network physical layer according to the detected result [col. 7, lines 21-44, col. 8, lines 31-39, 48-57].

14. Regarding claim **12**, McIntyre discloses:

- the device code comprises a Subsystem ID (OID) and a Subvendor ID (OID) of the PCI configuration [col. 14, lines 54-58].

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claims **7 & 8** are rejected under 35 U.S.C. 102(e) as being anticipated by **McIntyre**.

17. Regarding independent claim **7**, McIntyre implicitly discloses a network interface system supporting a plurality of physical layers (col. 6, lines 8-12), suitable for a computer network comprising:

- a network interface adapter (fig. 1, #122, NIC) supporting the plurality of physical layers, for coupling the computer network wherein the network interface adapter has a device code (drivers), and is able to connect the computer network through one of the network physical layers [col. 6, lines 8-12, 27-28, col. 6, line 47 – col. 7, line 14]; and

- a computer system (fig. 2, #100), wherein, the computer system is used to insert the network interface adapter (see NICs fig. 2), and drives the network interface adapter according to one of the network physical layers are selected by a user, wherein, after the user installs a plurality of device drivers (fig. 2, D1-D4) supporting the network physical layers, if the selected network physical layer is to be changed, another physical layer is selected from a screen provided by the basic input/output system of the computer system (fig. 1, # 112-116); and then, the basic input/output system reads the device code (driver) provided by the network interface adapter to calculate a simulation device code (“determination logic”) corresponding to the selected network physical layer according to the network physical layer selected and the device code read, so that the device driver is enabled [col. 8, lines 30-39, col. 14, line 54 – col. 15, line 14].

18. Regarding independent claim 8, McIntyre discloses a method for supporting a plurality of physical layers (col. 6, lines 8-12)...wherein the method comprises the steps of:

- providing a selection setup screen (fig. 1, #112, display) of the basic input/output system to select one of the network physical layers, which is physically used [col. 5, lines 5-11, 23-26, col. 14, lines 50-54];
- reading the device code (driver) provided by the network interface adapter (fig. 1, #122, NIC) supporting the plurality of physical layers [col. 14, lines 54-65]; and

- according to the selected network physical layer and the read device code (driver), calculating a simulation device code ("determination logic") corresponding to the selected network physical layer to enable one of the device drivers [col. 14, line 54 – col. 15, line 14].

Response to Arguments

19. Applicant's arguments filed July 11th, 2005 have been fully considered but they are not persuasive.

20. In the remarks (pgs. 8-10), Applicant substantially argues that:

- (a) "McIntyre did not address the problem of using a single network interface to connect a computer to different physical network layers".
- (b) McIntyre does not suggest the feature of "having a user select one of the network physical layers" and "calculating a simulation device code corresponding to the selected network physical layer".

21. In response to ¶20(a) above, Examiner disagrees. McIntyre does indeed implicitly disclose a device supporting a plurality of physical layers [col. 6, line 47 –col. 7, line 4]. Given the broadest interpretation by Examiner each port represents a different physical layer.

"FIG. 3 is a block diagram of a controller system 300 installed on the computer system 100 and implemented according to the present invention to enable teaming of any

Art Unit: 2153

number of NIC ports to act like a single virtual or logical device. As shown in FIG. 3, four NIC drivers D1-D4 are installed on the computer system 100, each for supporting and enabling communications with a respective port of one of the NICs N1-N4...Normally, each protocol binds with one NIC driver to establish a communication link between a computer and the network supported by the bound NIC. In general, binding a NIC port associates a particular communication protocol with the NIC driver and enables an exchange of their entry points. Instead, in the controller system 300, an intermediate driver 310 is installed as a stand alone protocol service that operates to group two or more of the NIC drivers D1-D4 so that the corresponding two or more ports function as one logical device.

Also, the intermediate driver 310 appears as a single protocol to each of the NIC drivers D1-D4 and corresponding NICs N1-N4. The NIC drivers D1-D4 (and the NICs N1-N4) are bound as a single team 320 as shown in FIG. 3. It is noted that a plurality of intermediate drivers may be included on the computer system 100, where each binds two or more NIC drivers into a team. Thus, the computer system 100 may support multiple teams of any combination of ports of installed NICs and NIC drivers."

22. In response to ¶20(b) above, Examiner disagrees. McIntyre does indeed disclose such a feature wherein the user selects an operating mode [*--a mode select code that enables a user to select any of the supported operating modes of the ports of the NICs coupled to the computer system such as the NICs N1-N4. The mode select module 1002 then sends one or more OIDs to send determination logic 1004 of the intermediate driver 310, including an OID with a mode value indicative of a desired operating mode.--*", fig. 10, col.14, lines 50-63].

23. In response to applicant's arguments concerning claim 7, the recitation "the network interface adapter has/comprises a plurality of network physical layers" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the

Art Unit: 2153

claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avalon Blenman whose telephone number is (571) 272-5864. The examiner can normally be reached on Mon-Fri, 7:00 AM - 4:30 PM (even date Mons. off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/064,455
Art Unit: 2153

Page 12

Avalon Blenman
Art Unit 2153
10/05/2005

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PRIMARY EXAMINER